

REMARKS**Status of the Claims**

Claims 1, 3-11, 13-21, and 23-30 are currently present in the Application, and claims 1, 11, and 21 are independent claims. Claims 1, 11, and 21 have been amended, no claims have been canceled, and no claims have been added in this response.

Examiner Interview

Applicants note with appreciation the telephonic interview conducted between Applicants' representative and the Examiner on January 10, 2008. During the telephonic interview, the Examiner and Applicants' representative discussed the 103 reference (McCrory, U.S. Patent No. 6,513,057). In particular, Applicants' representative and the Examiner discussed amending Applicants' claims to include a limitation that Applicants' first scheduler and second scheduler are two different schedulers that schedule tasks concurrently. The Examiner agreed that such limitation may read over McCrory but wished to perform another search. Such amendments are included in this response.

Claim Rejections - Alleged Anticipation Under 35 U.S.C. § 103

Claims 1, 3-11, 13-21, and 23-30 stand rejected under 35 U.S.C. § 103(a) as being unpatentable over McCrory (U.S. Patent No. 6,513,057, hereinafter "McCrory"). Applicants respectfully traverse these rejections.

Applicants have amended independent claim 1 to include limitations that Applicants' first scheduler and second scheduler are different schedulers, which schedule tasks concurrently. Support for such amendment may be found in Applicants' Figures 43, 46, and corresponding text and, therefore, no new matter is added with such amendment. As amended, claim 1 is a method claim for asymmetrically multithreading tasks in a computer environment that includes a plurality of dissimilar processors with limitations comprising:

- scheduling operation of a plurality of first tasks adapted to be executed by a first type of processor from the plurality of dissimilar processors, the scheduling performed by a first scheduler that maintains a first run queue that includes data corresponding to the first tasks;
- in response to the scheduling operation of the plurality of first tasks by the first scheduler, inserting the plurality of first tasks in the first run queue;
- scheduling operation of a plurality of second tasks adapted to be executed by a second type of processor from the plurality of dissimilar processors, **the scheduling performed by a second scheduler that is different than the first scheduler** and maintains a second run queue that includes data corresponding to the second tasks, **wherein the second scheduler schedules the second tasks concurrently with when the first scheduler schedules the first tasks**;
- in response to the scheduling operation of the plurality of second tasks by the second scheduler, inserting the plurality of second tasks in the second run queue; and
- wherein the first scheduler and the second scheduler are both located on a first processor that is the first type of processor.

Applicants' invention uses two different schedulers, which both reside on a first processor, to schedule tasks for two different processor types. As can be seen in Applicants' Figure 45, PU scheduler 4315 is different than SPU scheduler 4340. In contrast, McCrory teaches that a single operating system is solely responsible for scheduling tasks. McCrory states:

"An operating system, preferably stored in memory 332, is provided for scheduling tasks on processors 318, 320, 334, and 336. The operating system is responsible for scheduling the execution of process threads on the system processors 318, 320, 334, and 336." (col. 7, lines 26-29, emphasis added)

"For each new thread created, the HSMP OS determines the initial processor family to associate with that thread based on the binary code stream that the thread will begin executing." (col. 8, lines 12-14, emphasis added)

As can be seen from the above excerpts, McCrory only teaches the use of a single operating system to schedule tasks and, therefore, never teaches or suggests *“scheduling operation of a plurality of second tasks adapted to be executed by a second type of processor from the plurality of dissimilar processors, the scheduling performed by a **second scheduler that is different than the first scheduler**”* as claimed by Applicants.

Furthermore, Applicants’ first scheduler and second scheduler are able to schedule tasks concurrently since they are different schedulers. In contrast, McCrory’s scheduler does not concurrently schedule a first task type and a second task type because, as discussed above, McCrory’s operating system functions as a single scheduler that schedules one task at a time. Therefore, McCrory never teaches or suggests *“a second scheduler schedules the second tasks **concurrently** with when the first scheduler schedules the first tasks”* as claimed by Applicants.

Therefore, since McCrory does not teach or suggest all the limitations included in Applicants’ claim 1 as amended, amended claim 1 is allowable over McCrory. Claim 11 is an information handling system claim including similar limitations as claim 1 and, therefore, is allowable for at least the same reasons that claim 1 is allowable. Claim 21 is a computer program product claim including similar limitations as claim 1 and, therefore, is allowable for at least the same reasons that claim 1 is allowable.

Each of claims 3-10, 13-20, and 23-30 are dependent, either directly or indirectly, upon one of the allowable independent claims 1, 11, or 21. Therefore, each of claims 3-10, 13-20, and 23-30 are allowable for at least the same reasons that their respective independent claims are allowable.

Conclusion

As a result of the foregoing, it is asserted by Applicants that the remaining claims in the Application are in condition for allowance, and Applicants respectfully request an early allowance of such claims.

Applicants respectfully request that the Examiner contact the Applicants' attorney listed below if the Examiner believes that such a discussion would be helpful in resolving any remaining questions or issues related to this Application.

Respectfully submitted,

By /Leslie A. Van Leeuwen, Reg. No. 42,196/

Leslie A. Van Leeuwen, Reg. No. 42,196

Van Leeuwen & Van Leeuwen

Attorney for Applicant

Telephone: (512) 301-6738

Facsimile: (512) 301-6742